REMARKS

Examiner rejected Claims 1-11 under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,684,250 B2 (Anderson).

Examiner said that the steps of claim 1 were disclosed by Anderson.

Examiner said that a first step of claim 1 (measuring a network latency from a plurality of network stations to a plurality of network endpoints of known physical location by pinging said network endpoints from said network stations multiple times over a calibration period) was disclosed in Anderson at col. 54, lines 5-18. This cite does not disclose the first step of claim 1. In addition, this cite mentions steps that are not included in claim 1 (i.e., confidence factor, translation process, generate resolution indication, whether or not traces are going in the same direction, determining the number or traces, obtaining variances in distance, determining a circle around a predicted point, finding the intersection of circles, determining a distance scale and variances).

Examiner said that a second step of claim 1 (determining round-trip propagation times between each of said network stations and each of said network endpoints over the calibration period from said pinging and setting the network latency for each combination of said network stations and said network endpoints to the corresponding minimum round-trip propagation time determined for each of said combination of said network stations and said network endpoints) was disclosed in the Abstract and at col. 4, line 23-col. 5, line 50. Nowhere in these cites is disclosed that round-trip propagation times between network stations and network endpoints are determined, where corresponding minimum round-trip propagation times are used as latency periods between the same. Furthermore, these cites include steps not included in Applicants

invention (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a

common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses).

Examiner said that a third step of claim 1 (measuring the network latency from each of said network stations to said network equipment by pinging said network equipment from said network stations, determining the minimum round-trip propagation time between each of said network stations and said network equipment, and setting the network latency between each of said network stations and said network equipment to the corresponding minimum round-trip propagation time determined) was disclosed in the Abstract; at col. 4, line 23-col. 5, line 50; and at col. 25, lines 1-67. Nowhere in these cites is disclosed the step of measuring the network latency from each of said network stations to said network equipment by pinging said network equipment from said network stations, determining the minimum round-trip propagation time between each of said network stations and said network equipment, and setting the network latency between each of said network stations and said network equipment to the corresponding minimum round-trip propagation time determined. Furthermore, these cites include steps not included in Applicants invention (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a

minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was

correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, and Suffix LDM 146 that uses the last one or two words of a hostname).

Examiner said that a fourth step of claim 1 (for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector) was disclosed in the Abstract; at col. 4, line 23-col. 5, line 50; and col. 25, lines 1-67. Nowhere in these cites is disclosed the step of for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector. Furthermore, these cites include steps not included in Applicants invention (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one

geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location

determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, and Suffix LDM 146 that uses the last one or two words of a hostname).

Examiner said that a fifth step of claim 1 (arranging the network latency from said network equipment to each of said network station in turn, in said particular order, as vector elements in a network equipment vector) was disclosed in the Abstract; at col. 4, line 23-col. 5, line 50; col. 25, lines 1-67; and col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed the step of arranging the network latency from said network equipment to each of said network station in turn, in said particular order, as vector elements in a network equipment vector. Furthermore, the cites include steps not found in claim 1 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and

a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs),

confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, and Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances).

Examiner said that a sixth step of claim 1 (determining a distance between the network equipment vector and each of the endpoint vectors) was disclosed in the Abstract; at col. 4, line 23-col. 5, line 50; col. 25, lines 1-67; col. 53, line 32-col. 54, line 18, and col. 34, line 61-col.35, line 16. Nowhere in these cites are disclosed the step of determining a distance between the network equipment vector and each of the endpoint vectors. Furthermore, the cites include steps not found in claim 1 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated

by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability;

computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, and Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances).

Examiner said that a seventh step of claim 1 (identifying the physical location of the network equipment as proximate to said known physical location of the network endpoint corresponding to the endpoint vector having said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector) was disclosed in the Abstract; at col. 4, line 23-col. 5, line 50; col. 25, lines 1-67; col. 45, lines 10-29; and col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed the step of determining a distance between the network equipment vector and each of the endpoint vectors. Furthermore, the cites include steps not found in claim 1 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a

best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology

map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, and Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances).

Examiner said that the method of claim 2 (verifying that a geolocation of network equipment associated with a logical network address on a communications network is consistent with network equipment associated with vetted geolocations) is disclosed in Anderson at col. 22, lines 5-13). This cite says that a subnet blocking algorithm verifies every block within two

traceroutes. Claim 2 does not use a subnet blocking algorithm and does not verify every block within two traceroutes. Therefore, this cite does not disclose the method of claim 2.

Examiner said that a third step of claim 2 (setting the network latency for each combination of said network stations and said network equipments associated with vetted geolocations to the corresponding minimum round-trip propagation time determined for each of said combination of said network stations and said network equipments associated with vetted geolocations) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed the step of setting the network latency for each combination of said network stations and said network equipments associated with vetted geolocations to the corresponding minimum round-trip propagation time determined for each of said combination of said network stations and said network equipments associated with vetted geolocations. Furthermore, the cites include steps not found in claim 2 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a

hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net

LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; and forwarding negative determinations for manual resolution).

Examiner said that a fifth step through a ninth step of claim 2 (setting the network latency between each of said network stations and said network equipment to the corresponding minimum round-trip propagation time determined; for each of said network equipments associated with vetted geolocations arranging the network latency from each of said network equipments associated with vetted geolocations to each of said network stations in turn, in a particular order, as vector elements in a vetted equipment vector; arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector; determining a distance between the network

equipment vector and each of the vetted equipment vectors; and determining if the physical location of the network equipment is proximate to one of said network equipments associated with vetted geolocations) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed these steps. Furthermore, the cites include steps not found in claim 2 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or

a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from thos of the latest router in the trace; using the number of hops

to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; and forwarding negative determinations for manual resolution).

Examiner said that claim 3 (the method of claim 1 further comprising the step of determining if said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment is within a user defined threshold) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the steps of claim 1 and claim 3. Furthermore, the cites include steps not found in claim 3 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and

a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs),

confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 4 (where some steps of claim 3 are repeated until a distance is within a user-definable threshold) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line

32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the steps of claim 3 and claim 4. Furthermore, the cites include steps not found in claim 4 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to

traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data

warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 5 (where some steps of claim 3 are repeated until a distance is within a user-definable threshold using a different set of network endpoints) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the steps of claim 3 and claim 5. Furthermore, the cites include steps not found in claim 5 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a

Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules,

RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writting a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 6 (where some steps of claim 3 are repeated until a distance is within a user-definable threshold) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the

steps of claim 3 and claim 6. Furthermore, the cites include steps not found in claim 6 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses;

determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact

geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 7 (where some steps of claim 3 are repeated until a distance is within a user-definable threshold) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the steps of claim 3 and claim 7. Furthermore, the cites include steps not found in claim 7 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a

traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses

a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 8 (where the calibration period of claim 1 extends to all previous measuring of said network) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; col. 53, line 32-col. 54, line 18; and col. 21, line 15-col. 22, line 13. Nowhere in these cites are disclosed the steps of claim 1 and claim 8. Furthermore, the cites include steps not found in claim 8 (i.e.,

attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server;

using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; and generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of

network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 9 (the method of claim 1 where the calibration period extends back a user-defined period of time) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; and col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed the steps of claim 1 and claim 9. Furthermore, the cites include steps not found in claim 9 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic

location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc

Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes; generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Examiner said that claim 10 (the method of claim 1 where the communication is the) was disclosed in Anderson in col. 21, line 15-col. 22, line 13. Nowhere in this cite is disclosed the steps of claim 1 and claim 10. Furthermore, this cites include steps not found in claim 10 (i.e., start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

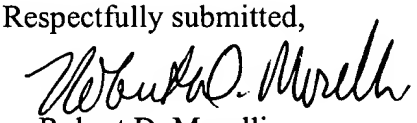
Examiner said that claim 11 (the method of claim 1 where some steps are performed based on user-definable external factors) was disclosed in Anderson in the Abstract, col. 4, line 23-col. 5, line 50; col.17, line 42-col. 18, line 18; col. 25, lines 1-67; col. 45, lines 10-29; and col. 53, line 32-col. 54, line 18. Nowhere in these cites are disclosed the steps of claim 1 and claim 11. Furthermore, the cites include steps not found in claim 11 (i.e., attach a confidence factor to each of the plurality of geographic locations; selecting an estimated geographic location as being a best estimate of a true geographic location of the network address based on a degree of confidence-factor weighted agreement; using a Last Known Host, a Next Known Host, a combination of a Next Known Host and a Last Known Host, or at least one suffix of a host name to generate a geographic location; using a confidence map, a hop ratio, a string length, a number of geographic locations generated by the at least one geographic location operation, a population value, a distance to a Last Known Host, a number of hops between a Last Known Host and the at least one geographic location, a minimum population of the at least one geographic location and a Last Known Host, a minimum connectivity index of the at least one geographic location and a Last Known Host, a distance to a Next Known Host from the at least one geographic location, a hop ratio indicating a relative position of a Next Known Host within a traceroute against the network address, a distance between a Next Known Host and the at least one geographic location, a number of hops between a Next Known Host and the at least one geographic location within a traceroute against the network address, a minimum population of a Next Known Host and the at least one geographic location, a minimum connectivity index between the at least one geographic location and a Next Known Host, a mean of connectivity indices for a Last Known Host and address, a position of a first character of a word indicative of the at least one geographic location within a host name, or a number of network addresses within a registered block of

network addresses; using a divide-and-conquer blocking algorithm; identifying a common geographic location associated with each of the subject and the test network addresses; identifying a substantially common traceroute generated responsive to traceroute operations performed against each of the subject and test network addresses; determining whether the subject and test network addresses utilizing a common DNS server; using a netmask blocking algorithm that utilizes a netmask associated with a subject network address; using a topology map; and using respective start and end network addresses; using a location synthesis process to search for similarities among location determinants and building a confirmation table; building location probability table (LPT); developing different values at different levels of geographic resolution; combining constituent confidence factor fields to identify a most likely location and an associated probability; computing the relationship between post-LSP confidence factors and accuracy; translating the location probability table to reflect the actual probability that the given network address was correctly located; using location determination modules (LDMs), confidence maps (CMs), confidence factors (CFs); using a location filter 122; using nine location determination modules, RegEx LDM 130 that uses string pattern matching in a hostname, Net LDM 132 that uses an IP Registry, DNS LDM 134 that uses a Domain Name Service Registry, ASN LDM 136 that uses an Autonomous System Registry, Loc LDM 138 that uses a DNS Loc Record, LKH LDM 140 that uses a Last Known Host in a Traceroute, NKH LDM 142 that uses a Next Known Host in a Traceroute, Sandwich LDM 144 that uses a combination of LKH and NKH, Suffix LDM 146 that uses the last one or two words of a hostname; using triangulation; extrapolating a general direction from the traceroutes; inferring direction by subtracting geographical locations of the originating network address from those of the latest router in the trace; using the number of hops to estimate distance; making "rsh" calls to obtain traceroutes;

generating a resolution indication using direction, number of traces, and variances in distances; rendering geolocation information for neighboring network addresses within a block to increase the confidence factor; writing a record into a data warehouse; executing a series of inexact geographic location operations; labeling inexact geographic location operations as such; executing inexact geolocation operations on a number of network addresses surrounding a subject network address; consolidating the outputs of the inexact geolocation operations by a unified mapping process; forwarding negative determinations for manual resolution; examining next-to-last hop in traceroute; looking one hop back; start looking for hosts at the high end; using a divide-and-conquer method of selective pinging; determining whether an end node traceroute is the same as the next-to-last hop traceroute; and looking for patterns in the last three hops).

Reconsideration of the application in light of the remarks is requested. Allowance of claims 1-11 is solicited.

Respectfully submitted,



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